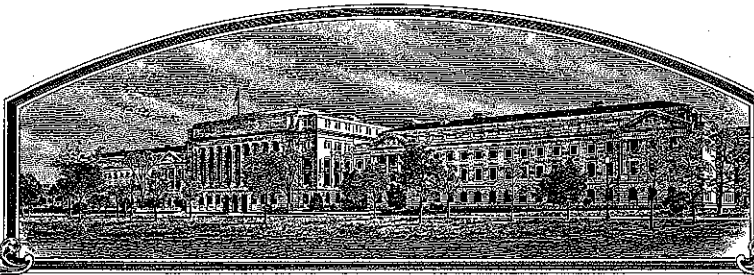


No.

9800051



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Piquante Brands International (PBI) Limited

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF SIXTEEN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEPPER

'Juanita'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fourteenth day of February, in the year two thousand and six.

Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[Signature]
Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
JOHANNES MARTINUS STEENKAMP Piquante Brands International (PTY) Limited 101 MacGillivray Road Glenferness, Midrand Guateng, South Africa Phone : +27 11 516 4202 Fax +27 11 463 3341 E-mail : ptovens@peppadew.co.za		PT1950	Juanita Piquante
5. TELEPHONE (include area code) (27) 12 463 203 6. FAX (include area code) (27) 12 463 270		FOR OFFICIAL USE ONLY	
		PVPO NUMBER	
7. GENUS AND SPECIES NAME Solanaceae Capsicum <i>Capsicum baccatum</i>		8. FAMILY NAME (Botanical) Annuum Solanaceae	
CROP KIND NAME (Common name)		DATE	
Pepper (chili)		12/30/97	
IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)		FILING AND EXAMINATION FEE:	
-		\$ 2450.00	
IF INCORPORATED, GIVE STATE OF INCORPORATION		DATE	
-		12/30/97	
NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS		CERTIFICATION FEE:	
Ms. Ansa van Vuuren c/o Peppadew International (PTY) Limited P.O. Box 1269, Tzaneen 0850, South Africa		\$ 682.00	
12. DATE OF INCORPORATION		DATE	
-		9/28/05	
14. TELEPHONE (include area code)			
Phone : +27 15 303 2161 Fax : +27 15 303 2168 E-mail : avanvuuren@peppadew.co.za			

CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

- a. ☒ Exhibit A. Origin and Breeding History of the Variety
- b. ☒ Exhibit B. Statement of Distinctness
- c. ☒ Exhibit C. Objective Description of the Variety
- d. ☒ Exhibit D. Additional Description of the Variety (Optional)
- e. ☒ Exhibit E. Statement of the Basis of the Applicant's Ownership
- f. ☒ Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository)
- g. ☒ Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)

DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)

☐ YES (If "yes," answer items 18 and 19 below) ☒ NO (If "no," go to item 20)

DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☐ YES ☐ NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN PREVIOUSLY USED, REGISTERED OR CERTIFIED IN THE U.S. OR OTHER COUNTRIES?

☒ YES (If "yes," give names of countries and dates) ☐ NO

REPUBLIC OF SOUTH AFRICA - Used Only - Since April 1996

The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believes(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

NATURE OF APPLICANT (Owner(s))		SIGNATURE OF APPLICANT (Owner(s))	
(Signature) Johannes Martinus Steenkamp		(Signature)	
NAME (Please print or type)		NAME (Please print or type)	
Johannes Martinus Steenkamp			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
MR	19/03/1997		

US PVP APPLICATION NUMBER 9800051
SOLANACEAE CAPSICUM ANNUUM PEPPER (CHILI) "Juanita"

FURTHER INFORMATION ON BREEDING IN REPLY TO OBJECTION OF
EXAMINER - EXHIBIT A

The breeder has now supplied the following information on the breeding of the variety:

1. The variety was not developed through crossbreeding of two known commercially available varieties. There was one parent namely *Solanacea*; *Capsicum annuum*. *baccatum*
2. The parent plant was discovered towards the end of 1993 in the garden of the holiday house of the breeder at the following address: 119 Longship Street, Plettenberg Bay, Western Cape, South Africa. The parent plant has since died, but seeds thereof were preserved.
3. The breeder submitted a portion of the parent plant to the South African Council for Scientific and Industrial Research, who classified the plant as falling in the *Capsicum annuum* sub-species.
4. The breeder harvested seed from the parent plant and germinated the seed in trays, from which approximately 600 plants were planted out in a trial field in June 1995. The 600 plants were evaluated as to their disease resistance and root development when planted into the field. This plant is self-pollinating and the breeder was therefore able to make a selection from the progeny of the parent plant and which progeny consistently displayed desired characteristics described in more detail below.
5. During different growing phases (i.e. early stage [first flower production]; middle stage and late stage [mature plant]), the breeder evaluated the plants as to the color and size of the leaves, and the length of the internodes between leaves. The onset of the early stage, when the first flowers appear, of different plants were compared.
6. During all stages the breeder evaluated and compared the :
 - a. color and size of the leaves;
 - b. length of the internodes between leaves;
 - c. number and size of the flowers;
 - d. number of flowers that developed into fruit;
 - e. development of the fruit, i.e. the rate of development and the uniformity and size of the fruit;
 - f. wall thickness of fully developed green fruit;
 - g. first fruit to ripen and the breeder observed that in a particular field, there were up to a three week lag;

- h. root development;
 - i. height of plant;
 - j. diameter of the main stem and thus the stability of the plant;
 - k. color of the fruit when ripe;
 - l. comparative time of ripening and size of the early stage fruit, the middle stage fruit and the late stage fruit, as these must preferably be as close as possible to each other;
 - m. time period between first flower to last flowering and between the first fruit set to last fruit set;
 - n. disease and pest resistance of fruit;
 - o. firmness, color, and aroma/taste of fruit; and
 - p. time delay from change of color to softening of the fruit.
7. Applying the above selection criteria, during the course of the first planting season, 200 plants were selected as having superior qualities and from the 200 plants 60 plants were selected which displayed consistent favorable characteristics.
 8. These 60 plants were used as the mother stock for the next season and seed were harvested from these plants and stored in a sterile and disease free environment.
 9. During 1996, the seed harvested from the 60 plants were cultivated and approximately 12750 plants planted in the trial field. Applying the above criteria, the 12750 plants were similarly evaluated for a second season and plants selected which showed the same consistent favorable characteristics. Seed were harvested from the plants expressing these characteristics and approximately the same amount of plants was planted for a third season during 1997.
 10. A third selection was made during the 1997 season, using the same criteria and commercial seed harvested from the plants displaying the consistent favorable characteristics.
 11. The breeder can therefore rightfully claim that he had developed the parent plant that he discovered into a new variety, as the plants that were finally selected consistently displayed characteristics that are superior to the parent plant in all respects, i.e. the plants have a higher yield, produce larger fruit with thicker walls, produce fruit earlier in the season, and the plants are stronger, larger and healthier than the parent plant. Comparative trials in Australia also showed that the current variety differ from other *Capsicum annuum* varieties, that were included in the trials.

SMs 1/10/05

In the original Exhibit A (dated 30 December 1997) Port Elizabeth was named as the location where the parent plant was discovered, because it was incorrectly assumed that the closest major city should be named as a reference point to identify the locality. Once the correction was made in the 9 April 2004 version, to the exact locality, the smaller town of Plettenberg Bay was identified. This town is situated approximately 235 km from Port Elizabeth, the closest major city. It falls just outside the regional borders of the Eastern Cape and therefore in the Western Cape. Please find the attached maps **Appendix B** and **Appendix C** as supportive information. The correct information for the location where the parent plant was discovered is: 119 Longship Street, Plettenberg Bay, Western Cape, South Africa.

3.2 Additional Information Exhibit A

Please add the following statements to Exhibit A with regard to uniformity and stability:

(3a) Yes, the variety is uniform

The variety is continuously evaluated for uniformity in certified seed production blocks. Seed production blocks are inspected during flowering and harvesting stages for off-types, which are then removed. Disease incidence is also monitored. Observed off-types include variations in plant habit (increase in height and branching) and fruit shape (elongated vs. heart-shaped). The percentage off-types in certified seed production blocks are below 1%.

(3b) Yes, the variety is stable.

Trial 3.2 (See **Appendix Statistical Analysis Reports**) was conducted with the objective to evaluate the stability of the variety over five generations. Samples of seed, representative of two different generations, at least five times removed from each other were planted out in a controlled environment. Leaf measurements were taken as an indication of stability. No significant differences were found between the two generations with regard to leaf length, leaf width or the ratio between leaf length and leaf width.

(4) Yes, genetic variations are occasionally observed during reproduction and multiplication.

Observed variations:

Single branch variegation < 0.5%

Fruit shape variation (elongated and heart-shaped) on one plant < 0.1%

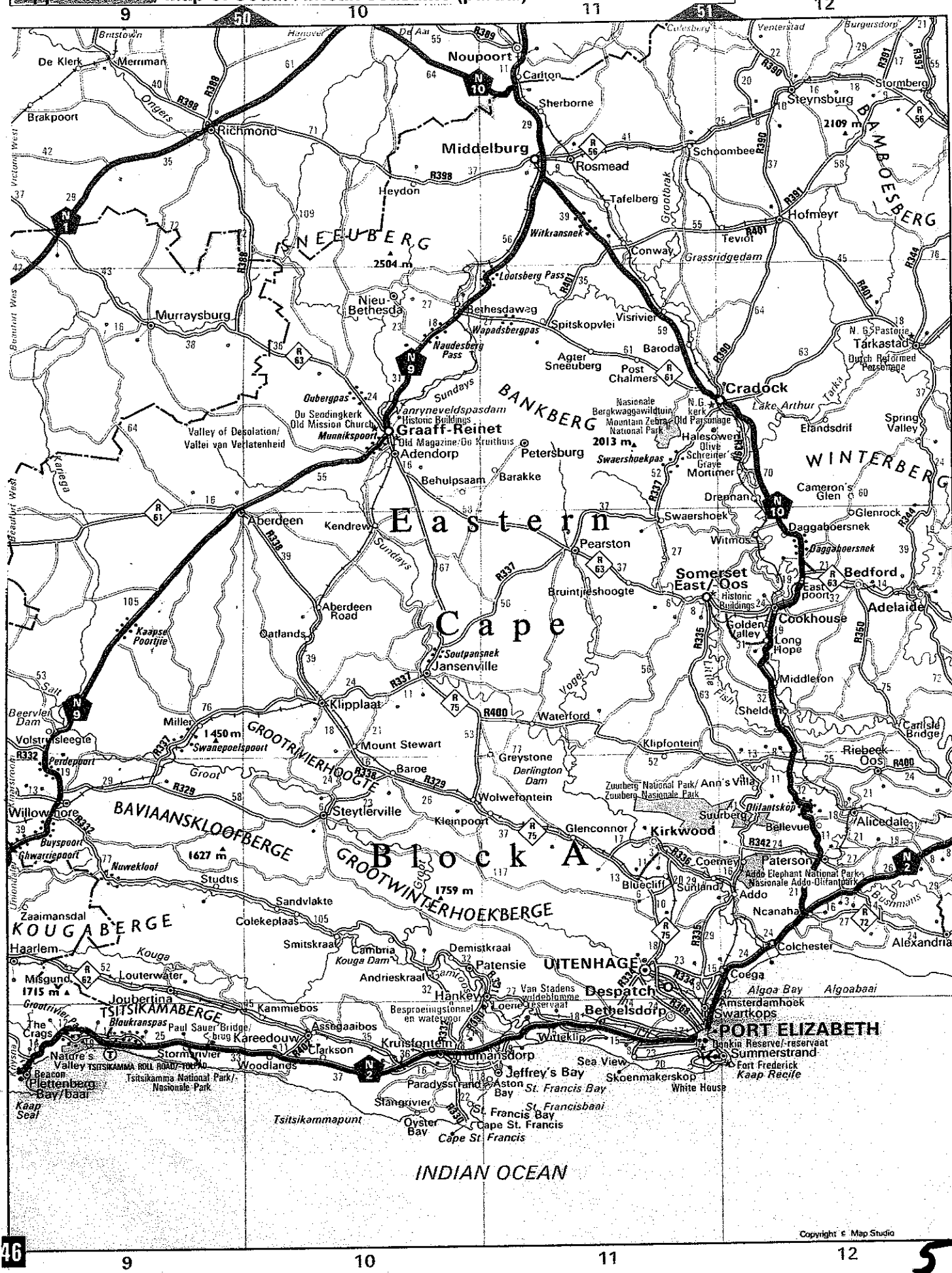
Plant habit variation, large and spreading branches < 1%

Summary

"Juanita" has been observed for at least ten generations of increase and is stable and uniform. Variants may appear in "Juanita" at a frequency of about 1 in 200. These variants may:

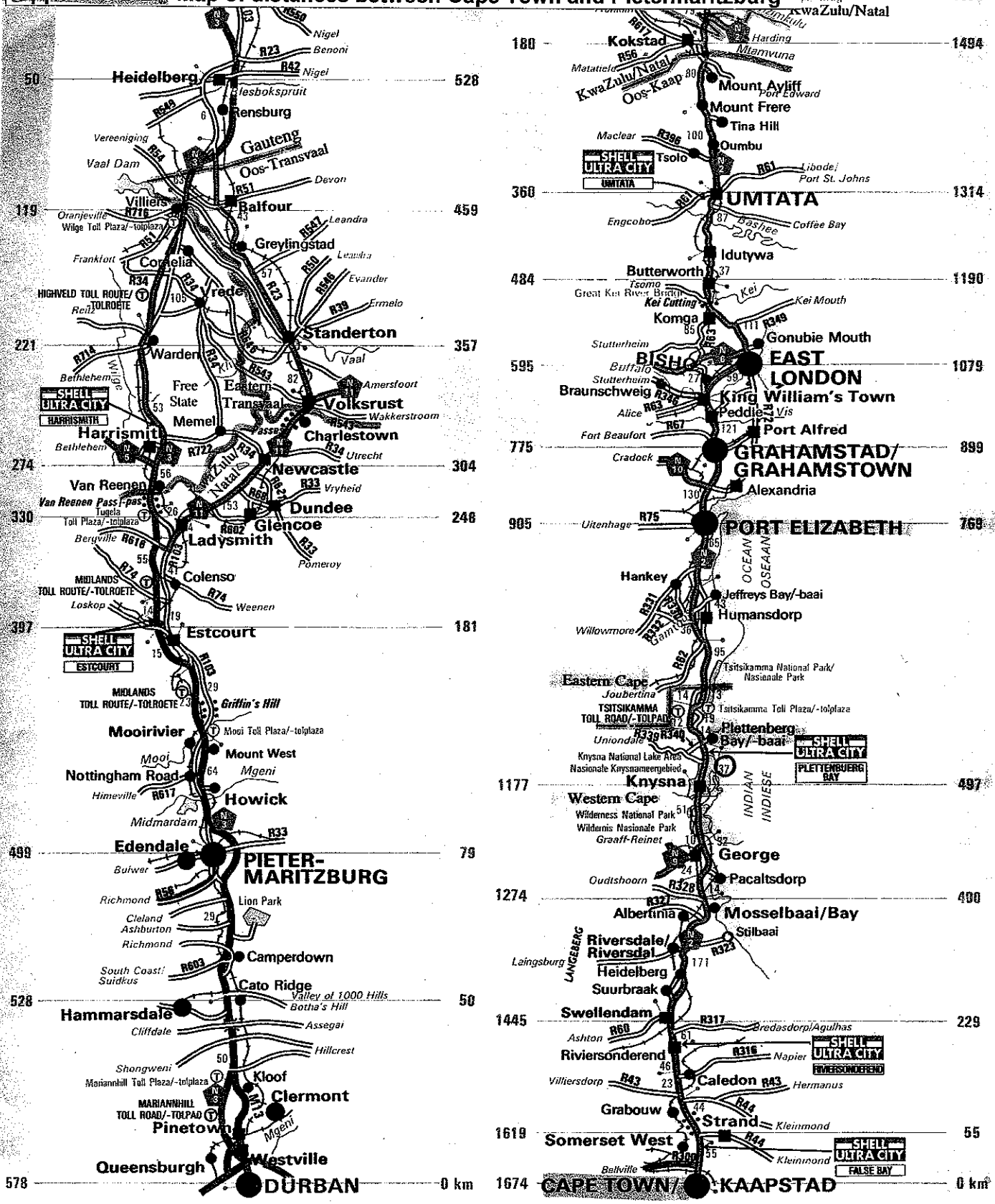
- Be taller, with a spreading plant habit and strong branches with small elongated fruit.
- Have elongated and heart-shaped fruit on one plant (rare).
- Have a single branch on a plant with variegated leaves.

The variants are identical in all other characteristics to "Juanita" as described in the **Revised Exhibit A**. These variants are known to be the result of spontaneous mutation due to aneuploidy. This type of mutation occurs in most, if not all, *Capsicum* and is a characteristic of the species. These variants are commercially acceptable and predictable.



10 January 2005
Complete Response
Requirement 2

Appendix B.2 Map of distances between Cape Town and Pietermaritzburg



USA PVP Application 9800051
Statement of Distinctness

"Juanita" is most similar to "Habanero", however "Juanita" has yellow-green spots (Munsell Color Chart 5Y 8/6) on the corolla (throat markings), whereas "Habanero" has no spots on the corolla.

"Juanita" is most similar to "Habanero", however "Juanita" has yellow anthers (Munsell Color Chart 2.5Y 8/6), whereas "Habanero" has purple anthers (Munsell Color Chart 5R 6-7/2-4).

"Juanita" is most similar to "Habanero", however fruit from "Juanita" has a blunt or depressed apex, whereas fruit from "Habanero" has an acute or pointed apex.

"Juanita" is most similar to "Habanero", however fruit from "Juanita" has a smooth appearance, whereas fruit from "Habanero" has a wrinkled appearance.

"Juanita" is most similar to "Habanero", however fruit from "Juanita" has a two to three locules, whereas fruit from "Habanero" has three to four locules.

"Juanita" is most similar to "Habanero", however fruit from "Juanita" develops dark purple discolorations (Munsell Color Chart 2.5R 4/2) on the surface before it turns red, whereas fruit from "Habanero" does not.

"Juanita" is most similar to "Habanero", however fresh fruit from "Juanita" is less pungent (1177) Scoville Units) than fruit from "Habanero" (300.000 Scoville Units).⁴⁵

"Juanita" is most similar to "Habanero", however fruit from "Juanita" are red at maturity (Munsell Color Chart 5R 3-5/10), whereas fruit from "Habanero" are orange yellow at maturity (Munsell Color Chart 5 YR 7/10).

"Juanita" is most similar to "Habanero", however fruit from "Juanita" are shorter (3 cm \pm 0.13 cm) than fruit from "Habanero" (5 cm \pm 0.3 cm).

"Juanita" is most similar to "Habanero", however leaves from "Juanita" are medium dark green with blue undertones (Munsell Color Chart 2.5G 4/6), whereas, leaves from "Habanero" are medium dark green with slightly yellow undertones (Munsell Color Chart 7.5 G 4/6).

⁴ Please discard previous incorrect pungency level notations of 27 April 2002 as stated for Exhibit B. Attached are [REDACTED] with test results for "Juanita".

⁵ Bosland, P.W. and Votava, E.J., 2003. In: Peppers: Vegetable and Spice Capsicums. CABI, Wallingford, UK, pp. 14-39. and www.egconsult.com

"Juanita" is most similar to "Habanero", however immature green fruit from "Juanita" is lighter green (Munsell Color Chart 5GY 6/8), than immature green fruit from "Habanero" (Munsell Color Chart 7.5 GY 5/8).

"Juanita" is most similar to "Habanero", however plants from "Juanita" generally 40 cm taller (± 2.20 cm) than plants from "Habanero" (± 3.96 cm) in different growing conditions.

"Juanita" is most similar to "Habanero", however leaves from "Juanita" are longer ($14.33\text{cm} \pm 1.51\text{cm}$) than leaves from "Habanero" ($12.75\text{cm} \pm 1.49\text{cm}$).

"Juanita" is most similar to "Habanero", however the leaf length : leaf width from "Juanita" are smaller ($1.5\text{cm} \pm 0.1\text{cm}$) than the leaf length : leaf width from "Habanero" ($1.7\text{cm} \pm 0.1\text{cm}$).

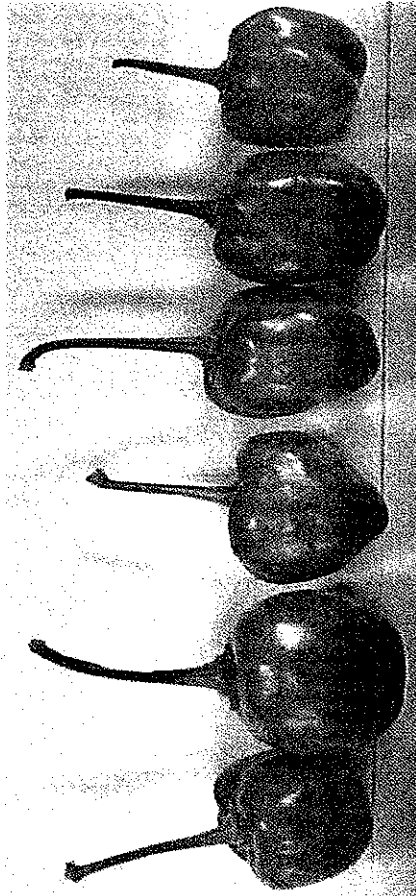
USA PVP Application 9800051

EXHIBIT B

PHOTO EVIDENCE TRIAL NO 1 and TRIAL NO 5

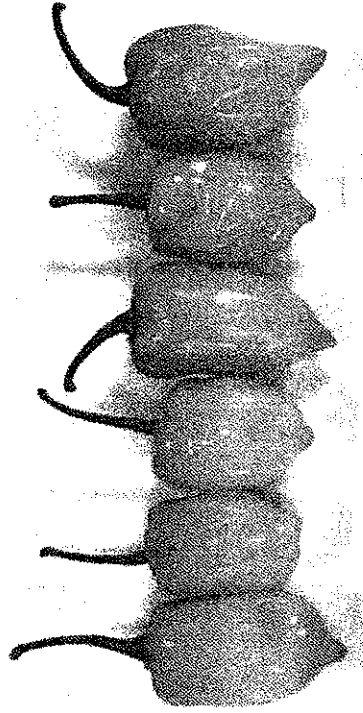
(B) QUALITATIVE DATA

(ii) FRUIT CHARACTERISTICS



Application variety: "Juanita"

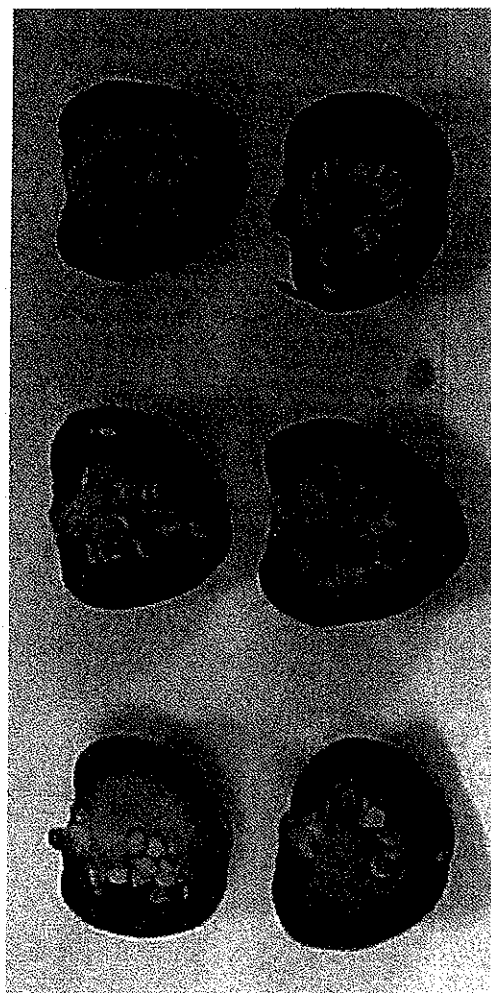
Fruit surface has a smooth, even appearance



Comparison variety: "Habanero"

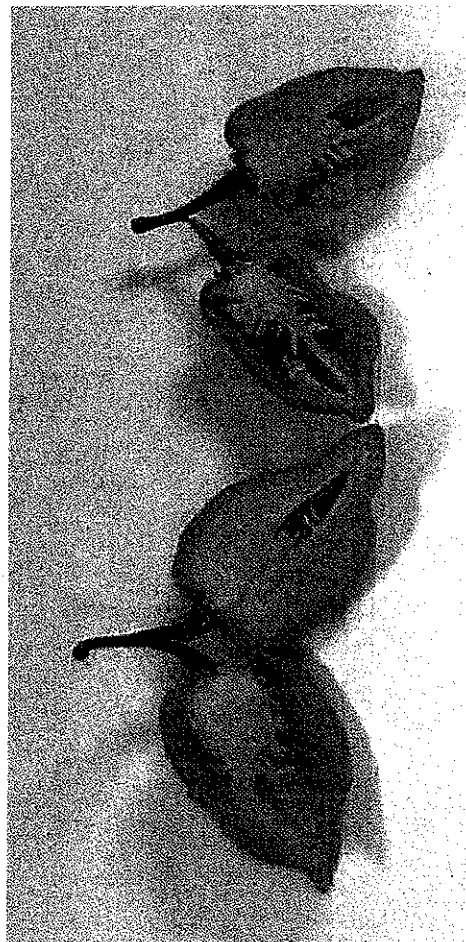
Fruit surface has an uneven, wrinkled appearance

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Application variety: "Juanita"

Shape of fruit apex is depressed or rounded

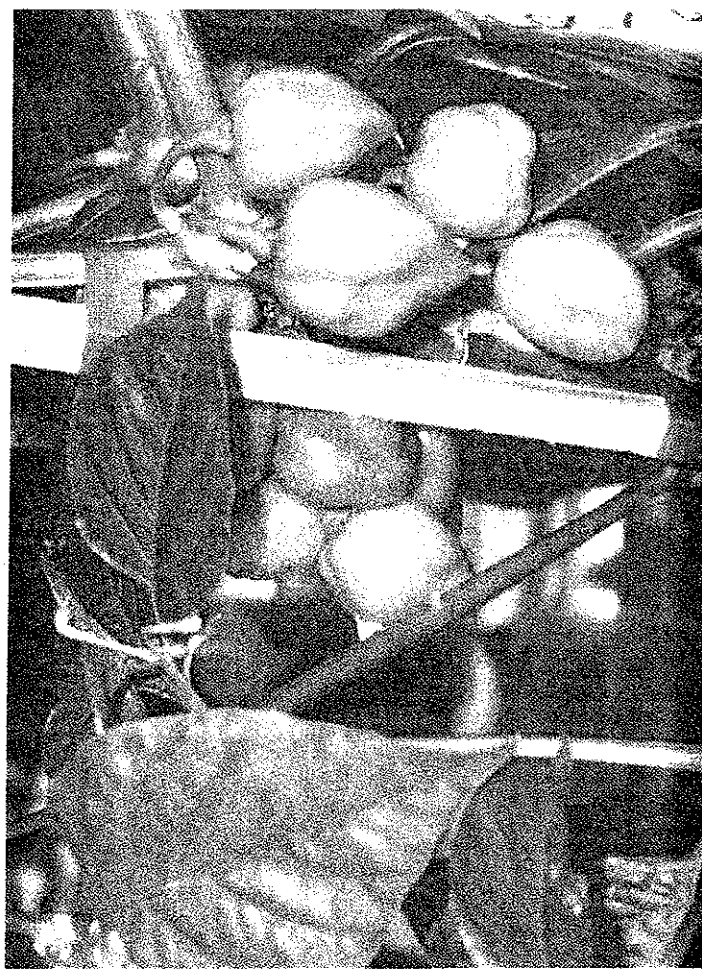


Comparison variety: "Habanero" Shape of fruit apex is acute and pointed



Application variety: "Juanita"

Anthocyanin presents as purple discoloration on fruit

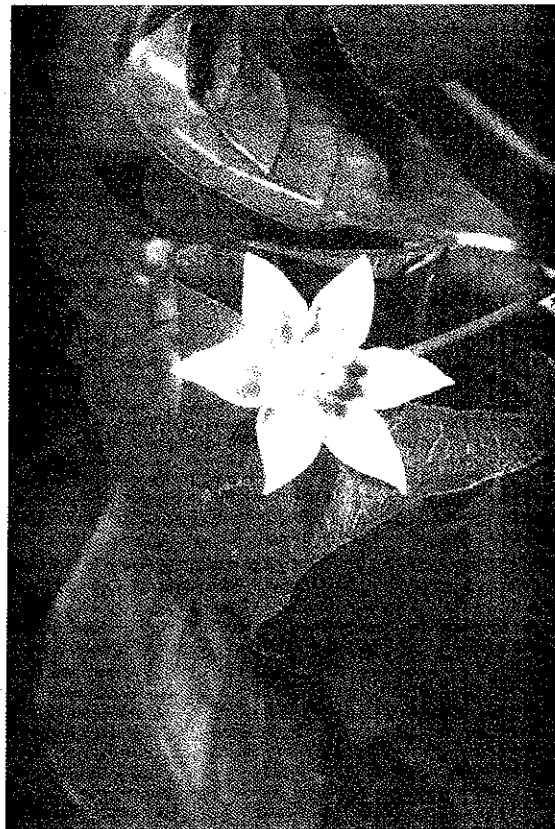


Comparison variety: "Habanero"

No visible signs of anthocyanin as purple discoloration before maturity (full range of ripening color changes not shown)

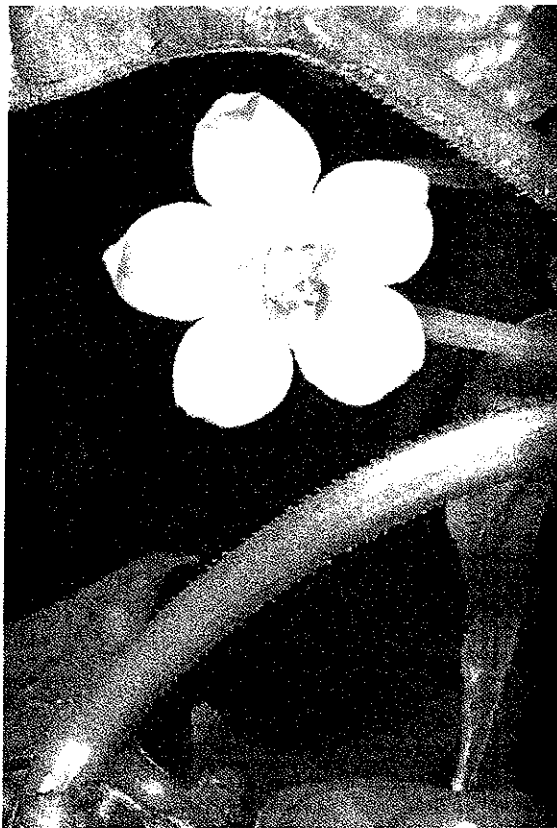
(ii) FLOWER CHARACTERISTICS

Application variety: "Juanita"



Yellow corolla spots
Yellow anthers

Comparison variety: "Habanero"



No spots on the corolla
Purple anthers

USA PVP Application 9800051

Based on overall morphology, "Juanita" is most similar to "Habanero".
 "Juanita" most clearly differs from "Habanero" in the following traits:

Trait	"Juanita"	"Habanero"	Location of evidence
<u>Qualitative traits</u>			
Fruit surface appearance	Smooth and even	Wrinkled and uneven	Exhibit B Photo Evidence Trial No 1 and No 5
Fruit apex	Blunt or depressed	Pointed or acute	
Corolla spots	Present	Absent	Exhibit C
Antocyanin presence on fruit before maturity (purple discoloration)	Present	Absent	
Fruit Locules	Two to three	Three to four	Analysis Report Trial 1
<u>Color traits</u>			
Immature fruit color	Medium -light green (5 GY 6/8)	Medium green (7.5 GY 5/8)	Trial 1, Trial 5
Mature fruit color	Red (5 R 3-5/10)	Orange yellow (5 YR 7/10)	
Mature leaf color	Medium dark green with blue undertones (2.5 G 4/6)	Medium dark green with yellow undertones (7.5 GY 4/6)	Statistical Analysis Trial 2, 3, 1, 4, 5.
Pollen color	Yellow (2.5 Y 8/6)	Blue / Purple (5R 6-7/2-4)	
<u>Quantitative traits</u>			Complete Response, Requirement 3, Reference 3a Appendix D - Laboratory Report
Plant height	85.7 cm \pm 2.2 cm	42.8 cm \pm 4.5 cm	
Leaf length	14.33 cm \pm 1.51 cm	12.75 cm \pm 1.49 cm	
Leaf length : Leaf width	1.5 cm \pm 0.1 cm	1.7 cm \pm 0.1 cm	
Fruit length	3.0 cm \pm 0.17 cm	5.0 cm \pm 0.15 cm	
<u>Other</u>			
Scoville units	1177 SU	300 000 SU	

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STATISTICAL DATA

TRIAL NO 1

Analysis Report

(B) QUALITATIVE DATA

(i) Color Characteristics ²

Variety	Mature Leaf		Immature Fruit		Mature Fruit	
	Munsell Color Chart Value	Verbal Color Value	Munsell Color Chart Value	Verbal Color Value	Munsell Color Chart Value	Verbal Color Value
"Juanita"	2.5 G 4/6	Medium-Dark Green with blue undertone	5 GY 6/8	Medium-Light Green	5 R 3.5/10	Ready to harvest when red, but optimal color when ripe is dark red
"Habanero"	7.5 GY 4/6	Medium-Dark Green with yellow undertone	7.5 GY 5/8	Medium Green	5 YR 7/10	Light orange with brown undertone

(ii) Morphological Fruit Characteristics

Variety	Surface Appearance	Fruit Apex	Anthocyanin
"Juanita"	Smooth and Even	Rounded or Depressed	Present in the form of purple discolorations on fruit surface before it ripens from a green color to a dark red color
"Habanero"	Wrinkled and Uneven	Acute or Pointed	No visible signs of anthocyanin is present on fruit surface before ripening

(ii) Morphological Flower Characteristics

Variety	Corolla	Pollen Color (Munsell Color Chart Value)
"Juanita"	Yellow spots on corolla throat	Yellow (2.5 Y 8/6)
"Habanero"	No spots	Blue / Purple (5R 6-7/2.4 - brighter)

Note:

1. Data was primarily analyzed using statistical program GenStat for Windows, 2000. Release 4.2 Fifth Edition. Oxford: VSN International. Treatment means in the quantitative data section were separated using *Fishers' protected t-test least significant difference (LSD)* at the 5% level of significance (Snedecor and Cochran, 1980). Reference: SNEDECOR, GW & COCHRAN, WG, 1980. Statistical methods (7th Ed.). Ames: Iowa State University Press, pp 507.

2. MUNSELL® COLOR CHARTS for Plant Tissues, GretagMacbeth LLC, 617 Little Britain Road, New Windsor, New York 12553-6148

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USA PVP Application: 9800051
TRIAL NO 2

**Statistical Analysis Report
(A) QUANTITATIVE DATA**

Variety Name	Trait	Mean		Standard Deviation of the Mean	Sample Size	Specific Statistical Analysis Used	Actual Statistic	Probability Value
"Juanita"	Plant Height	Measurements converted if required	Measurements used in statistical analysis	± 0.88 inches ± 1.80 inches	80 plants	Analysis of Variance	F=172.07 LSD(0.05)=4.154	Pr>F=0.001
		85.7 cm 42.8 cm	34.26 inches 17.13 inches					
"Habanero"	Leaf Length : Leaf Width	1.48 cm 1.83 cm	1.48 cm 1.83 cm	± 0.037 cm ± 0.052 cm	80 plants	Analysis of Variance	F=332.16 LSD(0.05)=0.06	Pr>F=0.001
		2.93 cm 4.48 cm	2.93 cm 4.48 cm					
"Juanita"	Fruit Length	2.93 cm 4.48 cm	2.93 cm 4.48 cm	± 0.13 cm ± 0.30 cm	80 plants	Analysis of Variance	F=60.14 LSD(0.05)=0.64	Pr>F=0.004

Appropriateness of Analysis	Reliability	Equal Variances Bartlett's Test for Homogeneity of Variances for Treatments (P>0.01)	Normality of Data Anderson-Darling Test (P<0.05)	Average Observed Values of Replicated Treatments	
				Plant Height (Inches)	Fruit Length (cm)
				Leaf Length : Leaf Width	
Plant Height	7.18	0.274*	ns (normal)	15.02	2.78
				16.89	2.88
				17.22	2.95
				19.40	3.10
				33.44	4.23
Leaf Length : Leaf Width	1.62	0.602*	ns (normal)	33.75	4.37
				34.39	4.38
				35.44	4.92
Fruit Length	6.40	0.213*	ns (normal)		

9800051

9800051

USA PVP Application: 9800051
TRIAL NO 3.1

1 Statistical Analysis Report
(A) QUANTITATIVE DATA

Variety Name	Trait	Mean		Standard Deviation of the Mean	Sample Size	Specific Statistical Analysis Used	Actual Statistic	Probability Value
"Juanita"	Plant Height	Measurements converted if required	Measurements used in statistical analysis	± 6.5 cm ± 3.4 cm	40 plants	Analysis of Variance	F=732.44 LSD(0.05)=3.336	Pr>F=0.001
"Habanero"		66.2 cm 21.6 cm	66.1 cm 21.7 cm					
"Juanita"	Leaf Length	14.33 cm	14.33 cm	± 1.51 cm	40 plants	Analysis of Variance	F=11.04 LSD(0.05)=0.960	Pr>F=0.002
"Habanero"		12.75 cm	12.75 cm	± 1.49 cm				
"Juanita"	Leaf Width	9.88 cm	98.8 mm	± 12.2 mm	40 plants	Analysis of Variance	F=11.04 LSD(0.05)=0.960	Pr>F=0.002
"Habanero"		7.35 cm	76.0 mm	± 8.1 mm				
"Juanita"	Leaf Length : Leaf Width	1.5 cm	1.5 cm	± 0.1 cm	40 plants	Analysis of Variance	F=51.33 LSD(0.05)=0.08	Pr>F=0.001
"Habanero"		1.7 cm	1.7 cm	± 0.1 cm				

Appropriateness of Analysis	Reliability	Equal Variances		Normality of Data	
		Coefficient of Variation (%CV)	Bartlett's Test for Homogeneity of Variances for Treatments (P>0.01)	Anderson-Darling Test (P<0.05)	
Plant Height	11.9	0.01	0.01	ns (normal)	
Leaf Length	11.1	0.964	0.964	ns (normal)	
Leaf Width	12.1	0.01	0.01	ns (normal)	
Leaf Length : Leaf Width	7.80	0.191	0.191	*(not normal)	

Note:

1. Plant Varieties Journal 1998 Vol.11 No. 3

USA PVP Application: 9800051
TRIAL NO 3.2

Stability Data
Statistical Analysis Report
(A) QUANTITATIVE DATA

Variety Name	Trait	Mean		Standard Deviation of the Mean	Sample Size	Specific Statistical Analysis Used	Actual Statistic	Probability Value
Generation 5 "Juanita"	Leaf Length	Measurements converted if required	Measurements used in statistical analysis					
		14.45 cm	14.45 cm	± 0.62 cm				
Generation 1 "Juanita"		14.57 cm	14.57 cm	± 0.65 cm	64 plants	Analysis of Variance	F=0.29na	Pr>F=0.594 ns
Generation 5 "Juanita"	Leaf Width	12.27 cm	12.27 cm	± 0.38 cm				
		12.41 cm	12.41 cm	± 0.49 cm	64 plants	Analysis of Variance	F=0.78na	Pr>F=0.384 ns
Generation 5 "Juanita"	Leaf Length : Leaf Width	1.18 cm	1.18 cm	± 0.03 cm				
		1.18 cm	1.18 cm	± 0.05 cm	64 plants	Analysis of Variance	F=0.01na	Pr>F=0.913 ns

Appropriateness of Analysis	Reliability	Equal Variances Bartlett's Test for Homogeneity of Variances for Treatments (P>0.01)	Normality of Data Anderson-Darling Test (P<0.05)
Leaf Length	4.4	0.886	normal
Leaf Width	3.6	0.347	normal
Leaf Length : Leaf Width	3.4	0.282	normal

9800051

USA PVP Application: 9800051
TRIAL NO 4

Statistical Analysis Report
(A) QUANTITATIVE DATA

Variety Name	Trait	Mean		Standard Deviation of the Mean	Sample Size	Specific Statistical Analysis Used	Actual Statistic	Probability Value
"Juanita"	Leaf Length	Measurements converted if required	Measurements used in statistical analysis	± 0.14 cm ± 0.56 cm	60 plants	Analysis of Variance	F=61.44 LSD(0.05)=0.923	Pr>F=0.001
"Habanero"		10.4 cm 7.8 cm	10.4 cm 7.8 cm					
"Juanita"	Leaf Width	7.8 cm 4.2 cm	7.8 cm 4.2 cm	± 0.25 cm ± 0.33 cm	60 plants	Analysis of Variance	F=211.72 LSD(0.05)=0.671	Pr>F=0.001
"Habanero"		7.8 cm 4.2 cm	7.8 cm 4.2 cm					
"Juanita"	Leaf Length : Leaf Width	1.3 cm 1.9 cm	1.3 cm 1.9 cm	± 0.03 cm ± 0.11 cm	60 plants	Analysis of Variance	F=64.72 LSD(0.05)=0.18	Pr>F=0.001
"Habanero"		1.3 cm 1.9 cm	1.3 cm 1.9 cm					
"Juanita"	Fruit Length	3.0 cm 4.9 cm	3.0 cm 4.9 cm	± 0.17 cm ± 0.15 cm	60 plants	Analysis of Variance	F=205.18 LSD(0.05)=0.37	Pr>F=0.001
"Habanero"		3.0 cm 4.9 cm	3.0 cm 4.9 cm					

Appropriateness of Analysis	Requirements for Data	Reliability	Equal Variances	Normality of Data
		Coefficient of Variation (%CV)	Bartlett's Test for Homogeneity of Variances for Treatments (P>0.01)	Anderson-Darling Test (P<0.05)
Leaf Length		4.5	*0.121	ns (normal)
Leaf Width		4.9	*0.721	ns (normal)
Leaf Length : Leaf Width		4.9	*0.115	ns (normal)
Fruit Length		4.20	*0.878	ns (normal)

USA PVP Application: 9800051
TRIAL NO 4¹

Analysis Report
(B) QUALITATIVE DATA

(I) Morphological Fruit
Characteristics

Variety	Shape of Apex	Texture of Surface
"Juanita"	Depressed	Smooth
"Habanero"	Acute	Wrinkled

Note:

1. Characteristics numerical according to UPOV guidelines : TG/76/3: 1991-03-18

USA PVP Application: 9800051
TRIAL NO. 5

Statistical Analysis Report
(A) QUANTITATIVE DATA

Variety Name	Trait	Mean		Standard Deviation of the Mean	Sample Size	Specific Statistical Analysis Used	Actual Statistic	Probability Value
		Measurements converted if required	Measurements used in statistical analysis					
"Juanita"	Plant Height	194.59 cm	194.59 cm	± 13.66 cm	12 plants	Analysis of Variance	F=5.33 LSD(0.05)=30.74	Pr>F=0.004
"Habanero"		155.33 cm	155.33 cm	± 20.00 cm				
"Juanita"	Leaf Length	14.44 cm	14.44 cm	± 2.85 cm	12 plants	Analysis of Variance	F=5.55 LSD(0.05)=2.71	Pr>F=0.003
"Habanero"		10.67 cm	10.67 cm	± 2.31 cm				
"Juanita"	Leaf Width	9.00 cm	9.00 cm	± 2.24 cm	12 plants	Analysis of Variance	F=4.02 LSD(0.05)=2.85	Pr>F=0.02
"Habanero"		6.33 cm	6.33 cm	± 2.08 cm				
"Juanita"	Leaf Length : Leaf Width	1.6 cm	1.6 cm	± 0.13 cm	12 plants	Analysis of Variance	F=1.94 LSD(0.05)=0.06	Pr>F=0.013
"Habanero"		1.68 cm	1.68 cm	± 0.25 cm				
"Juanita"	Fruit Length	3.67 cm	3.67 cm	± 0.58 cm	12 plants	Analysis of Variance	F=3.35 LSD(0.05)=0.82	Pr>F=0.03
"Habanero"		5.00 cm	5.00 cm	± 0.0 cm				
		Reliability	Equal Variances	Normality of Data				
Appropriateness of Analysis		Coefficient of Variation (%CV)	Bartlett's Test for Homogeneity of Variances for Treatments (P>0.01)	Anderson-Darling Test (P<0.05)				
Plant Height	Requirements for Data	9.4	*0.268	ns (normal)				
Leaf Length		12.5	*0.858	ns (normal)				
Leaf Width		18.1	*0.437	ns (normal)				
Leaf Length : Leaf Width		12.1	*0.311	ns (normal)				
Fruit Length		10.2	*1.00	ns (normal)				

USA PVP Application: 9800051
TRIAL NO 5

Analysis Report
(B) QUALITATIVE DATA

(i) Morphological Fruit
Characteristics

Variety	Surface Appearance	Fruit Apex	Anthocyanin
"Juanita"	Smooth and Even	Rounded or Depressed	Present in the form of purple discolorations on fruit surface before it ripens from a green color to a dark red color
"Habanero"	Wrinkled and Uneven	Acute or Pointed	No visible signs of anthocyanin is present on fruit surface before ripening

(ii) Morphological Flower
Characteristics

Variety	Corolla	Pollen Color
"Juanita"	Yellow spots on corolla throat	Yellow (2.5 Y 8/6)
"Habanero"	No spots	Blue / Purple (5R 6-7/2-4 - brighter)

Statistical Analysis Report TRIAL INFORMATION

Trial 1 and Trial 2

Planting date:

August 1999 (Trial 1) and August 2000 (Trial 2)

Locality:

Tifton, Georgia

Growing conditions:

The trials were planted on loam-sand soils that were limed prior to planting and the pH was maintained between 6.2 and 6.8. A drip irrigation and fertilizer system was used and the plants were trellised. Fertilizer was applied during the growing season at a rate of 27 kg/ha N : 16.2 kg/ha P : 16.2 kg/ha K during the evaluation of the trials. The plants were planted on slightly raised beds that were covered with darkened plastic. A planting density of 33 334 plants/ha was maintained. The average air temperatures for the locality are summarized in Table 1.

**Table 1 Summary of average ambient temperatures for Tifton, Georgia
(1912 – 2003)**

Month	Average maximum temperature (°C)	Average minimum temperature (°C)
August	33.2	21.1
September	30.0	17.1
October	27.3	11.0
November	21.0	5.1
December	16.1	4.4

Experimental design:

The trials were planted in a randomized block design. The treatments consisted of two varieties, the application variety *C. baccatum* var. "Juanita" and the control variety *C. chinensis* var. "Habanero". The treatments were replicated four times in trial 2 and five times in trial 1. Measurements were taken when the plants were physiologically mature. Each replicated plot contained 20 plants, all of which were measured and evaluated. No pooling of data was done.

Results:

The evaluation of Trial 1 was based on the morphological and horticultural descriptions used in Exhibit C. Values were attributed to each of the characteristics and the varieties were evaluated accordingly. Possible distinguishing quantitative characteristics did not yield satisfactory, reliable or repeatable results. Qualitative characteristics were measured and were absolute in their discriminatory value. Results are shown in attached Trial 1, Qualitative Analysis.

The evaluation of Trial 2 was done on the actual values as collected from the data plants for various horticultural and morphological characteristics. The data from Trial 2 yielded satisfactory, reliable and repeatable results. It showed clear

differences in quantitative characteristics that can be used to distinguish between the application and comparison variety.

Trial 3.1 (Variety Evaluation)

Planting date:

January 1998

Locality:

Waite, South Australia

Growing conditions:

Seeds were germinated on filter paper and transplanted at the first true leaf stage in a UC growing mixture (University of California) in 200 mm pots. The pots remained in a shade house for 105 days and then were transferred to a glass house maintained at 20°C minimum temperature. Watering, fertilization, with slow-release granules (Osmocote) and pest control were carried out as needed. Under these local trial conditions "Juanita" failed to flower.

Experimental design:

The trials were planted in a randomized block design. The treatments consisted of three varieties, the application variety *C. baccatum* var. "Juanita" and two control varieties that included *C. chinensis* var. "Habanero". Each variety consisted of 40 plants (2 per pot) arranged in single pot replicates. Measurements were taken from one plant selected at random in each of the twenty pots per variety. Seed, seedling and leaf characteristics were confirmed in a local comparative trial. Height of the plants was measured 90 days after germination of seed. Leaf characteristics were measured on the oldest leaf on the first branch. No pooling of data was done.

Results:

Although the height of both the application and comparison variety is less than the plant height measured in Trial 2, this could be attributed to the time that the measurements were taken as well as the growing conditions in Australia. It would appear that "Juanita" failed to flower due to a lack of sufficient heat units. The difference in height between "Juanita" and "Habanero" remains constant for Trial 2 and Trial 3.1, as does the leaf length : leaf width ratio.

Trial 3.2 (Stability Evaluation of Application Variety: "Juanita")

Planting date:

2000

Locality:

Waite, South Australia

Growing conditions:

Same as for Trial 3.1

Experimental design:

The first and fifth generation of selfed seed from the application variety "Juanita" was planted in 16 pots (2 plants / pot) and placed in a controlled environment. Leaf measurements were taken at the 7th node from the base of the plants. No pooling of data was done.

Results:

The results from this stability trial clearly shows no significant difference in leaf width, length or the length : width ratio between leaves from the two generations.

Trial 4**Planting date:**

September 1998

Locality:

Pretoria, Gauteng Province, South Africa

Growing conditions:

The trials were planted on soil that contained medium clay content in the spring and were evaluated during the following growing season for quantitative and qualitative characteristics. Plants were not trellised or ridged and a planting density of approximately 16 667 plants/ha. An overhead irrigation system was used and plants were fertilized according to a standard program. Pest control was done on scouting and incidence levels.

Table 2 Summary of average ambient temperatures for Pretoria, South Africa (1961 – 1990) Long term averages

Month	Average maximum temperature (°C)	Average minimum temperature (°C)
September	26	12
October	27	14
November	27	16
December	28	17
January	29	18
February	28	17
March	27	16
April	24	12

Experimental design:

These trials were designed according to UPOV guidelines (TG/76/3: 1991-03-18). The treatments consisted of various pepper varieties that were evaluated for plant breeders' rights. Plot sizes consisted of rows of 40 plants for each of the varieties randomly replicated three times. The application variety *C. baccatum* var. "Juanita" and the comparison variety *C. chinensis* var. "Habanero" were included in the trial. Ten plants of each of the varieties were randomly selected in each of the three replications and evaluated. No pooling of data was done.

Results:

Quantitative and qualitative characteristics for the application and comparison variety were summarized as the official variety description after plant breeders' rights were awarded to both the application and comparison varieties.

Trial 5**Planting date:**

October 2003

Locality:

Letsitele, Limpopo Province, South Africa

Growing conditions:

Seeds of the application and comparison varieties were germinated in trays containing a medium grade, steam sterilized pine bark. The seedlings were transplanted (1 plant / bag) after 6 to 8 weeks to black plastic bags (200mm) containing the same growing mixture. The bags were placed in a controlled environment. Maximum temperatures were maintained between 28 and 30°C and minimum temperatures were maintained between 20 and 18°C for the duration of the trial. Fertilizer was applied according to the recommended commercial program 370 kg/ha N : 43 kg/ha P : 500 kg/ha K on a weekly basis. Irrigation was done by hand as required. Pest and disease control was done on scouting and incidence levels.

Experimental design:

Four replications consisting of five plants each of various different varieties were placed in a complete randomized block design. The application variety: "Juanita" and the comparison variety "Habanero" were included in this trial. Three individual plants of "Habanero" and nine individual plants of "Juanita" were randomly selected and evaluated on a weekly basis for quantitative as well as qualitative characteristics.

Results:

The results in this trial have confirmed results obtained in the other trials with regard to distinguishing quantitative and qualitative characteristics.

10 January 2005
Complete Response
Revised Exhibit C
Application Variety

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

FOR PROVED: OMB NO. 0581-005
EXHIBIT 1
(Pepper)

OBJECTIVE DESCRIPTION OF VARIETY
PEPPER (*Capsicum* spp.)

NAME OF APPLICANT(S) Piquante Brands International (PTY) LTD	TEMPORARY DESIGNATION	VARIETY NAME "Juanita"
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) 101 Macgillivray Road Glenferness, Midrand Gauteng Province, SOUTH AFRICA		FOR OFFICIAL USE ONLY PVPO NUMBER 9800051

Place the appropriate number that describes the varietal character of this variety in the boxes below. Characteristics described, including numerical measurements should represent those which are TYPICAL for the variety. Fill unused columns with zeroes (e.g., 0 9 9 when number is 99). The location of the test area is **Tifton, Georgia, USA**.
Please answer questions appropriate for your variety if the information is available.

COMPARISON VARIETIES

1 = Yolo Wonder L
2 = Pimiento Perfection
3 = Mexican Chili
4 = Anaheim Chili

5 = Cayenne Long Red
6 = Cubanelle
7 = Jalapeño
8 = Serrano

9 = Sweet Cherry
10 = Floral Gem
11 = Sweet Banana
12 = Tabasco
13 = Other (Specify)

"Habanera"

1. SPECIES:

3

1 = *C. annuum*

2 = *C. frutescens*

3 = *C. baccatum*

4 = *C. chinense*

5 = Other (Specify)

*** 2. MARKET MATURITY:**

84

Days from transplanting until mature green stage

--	--	--

Days from direct seed until mature green stage

101

Days from transplanting until mature red or yellow stage

--	--	--

Days from direct seed until mature red or yellow stage

From transplanting:

23

Days earlier than

13

Same as

Days later than

Comparison varieties

From direct seed:

Days earlier than

Same as

Days later than

Comparison varieties

3. PLANT:

1

Habit:

1 = Compact

2 = Spreading

3 = Other (Specify)

86

cm Height

cm Shorter than

Same as

cm Taller than

43

13

Comparison varieties

9800051

3. PLANT (Continued):

<input type="text" value="61"/>	cm Width		
<input type="text" value=""/>	cm Narrower than	<input type="text" value=""/>	} Comparison varieties
	Same as	<input type="text" value=""/>	
<input type="text" value="14"/>	cm Wider than	<input type="text" value="13"/>	
<input type="text" value="66"/>	mm Length of third internode (from soil surface)		
<input type="text" value="2"/>	Basal branches:	1 = None	2 = Few (2-3)
			3 = Many (over 3)
<input type="text" value="1"/>	Branch flexibility:	1 = Willowy (Cayenne Long Red)	2 = Rigid (Yolo Wonder L)

4. LEAVES:

<input type="text" value="2"/>	Foliage color:	1 = Light Green	4 = Purple	<input type="text" value="1"/> Leaf and stem pubescence: 1 = Absence (Yolo Wonder L) 2 = Moderate (Serrano) 3 = Heavy (Chili Piquin)
		2 = Medium Green	5 = Other (Specify) _____	
		3 = Dark Green		
<input type="text" value="2"/>	Mature shape:	1 = Lanceolate	2 = Elliptic	
<input type="text" value="2"/>	Mature size:	1 = Small (Tabasco)	2 = Medium (Anaheim Chili)	3 = Large (Yolo Wonder L)

5. FLOWER:

<input type="text" value="5"/>	Calyx lobe number		
<input type="text" value="5"/>	Petal number		
* <input type="text" value="3"/>	Corolla color:	1 = White	2 = Purple
			3 = Other (Specify) <u>Off-white</u>
<input type="text" value="1"/>	Corolla throat markings color:	1 = Yellow (tan)	2 = Purple
			3 = Other (Specify) _____
<input type="text" value="1"/>	Anther color:	1 = Yellow	2 = Purple
<input type="text" value="1"/>	Style length:	1 = Less than stamen	2 = Same as stamen
			3 = Exceed stamen
<input type="text" value="1"/>	Flower number per leaf axil:	1 = One	2 = Two or more
<input type="text" value="1"/>	Self-incompatibility:	1 = Absent	2 = Present
<input type="text" value="1"/>	Cytoplasmic male sterility:	1 = Absent	2 = Present

6. FRUIT:

<input type="text" value="13"/>	Group:	1 = Bell (Yolo Wonder L)	8 = Small hot (Serrano)
		2 = Pimiento (Pimiento Perfection)	9 = Cherry (Sweet Cherry)
		3 = Ancho (Mexican Chili)	10 = Short wax (Floral Gem)
		4 = Anaheim Chili (Sandia)	11 = Long wax (Sweet Banana)
		5 = Cayenne (Cayenne Long Red)	12 = Tabasco (Tabasco)
		6 = Cuban (Cubanelle)	13 = Other (Specify) <u>C. baccatum (domesticated)</u>
		7 = Jalapeño (Jalapeño)	
<input type="text" value="2"/>	Pungency:	1 = Sweet (Yolo Wonder L)	2 = Hot (Jalapeño)
<input type="text" value="8"/>	Immature color:	1 = Light Green (Cubanelle)	5 = Yellow (Yellow Belle)
		2 = Medium Green (Long Thin Cayenne)	6 = Purple (Violetta)
		3 = Dark Green (Yolo Wonder L)	7 = Ivory (Twiggy)
		4 = Very Dark Green (Ancho Chili)	8 = Other (Specify) <u>medium green with purple discolorations</u>
<input type="text" value="1"/>	Mature color:	1 = Red (Yolo Wonder L)	5 = Ivory
		2 = Orange	6 = Green (Permagreen)
		3 = Orange-yellow (Golden Calwonder)	7 = Salmon
		4 = Brown (Mulatto)	8 = Lemon Yellow

Scoville Units 1177

Capsaicin 78.51 ppm (mg/kg)

545
11/10/05
27

6. FRUIT (Continued):

<input type="text" value="1"/>	Surface smoothness:	1 = Smooth (Yolo Wonder L)	2 = Rough (Long Thin Cayenne)
<input type="text" value="2"/>	Calyx shape:	1 = Cup-shaped	2 = Saucer-shaped
<input type="text" value="2"/>	Position:	1 = Upright (Santaka)	2 = Pendent (Jalapeño)
<input type="text" value="2"/>	Base shape:	1 = Cupped (Yolo Wonder L)	2 = Rounded (Jalapeño)
<input type="text" value="2"/>	Apex shape:	1 = Pointed (Long Thin Cayenne)	2 = Blunt (Yolo Wonder L)
<input type="text" value="2"/>	Flesh thickness:	1 = Thin (Long Thin Cayenne)	2 = Medium (Anaheim Chili)
<input type="text" value="03"/>	cm Length		
<input type="text" value="02"/>	cm Shorter than	<input type="text" value="13"/>	} Comparison varieties
	Same as	<input type="text"/>	
<input type="text"/>	cm Longer than	<input type="text"/>	
<input type="text" value="027"/>	mm Diameter of fruit at calyx attachment		
<input type="text" value="005"/>	g weight per fruit		
* <input type="text" value="5"/>	Fruit shape:	1 = Bell (Yolo Wonder L) 3 = Elongate (Long Thin Cayenne) 5 = Oblate (Sunnybrook)	2 = Conical (Pimiento) 4 = Oblong (Jalapeño) 6 = Globe (Red Cherry)
<input type="text" value="1"/>	Fruit set:	1 = Scattered	2 = Concentrated
<input type="text" value="2"/> to <input type="text" value="3"/>	Number of locules (range)		
<input type="text" value="2"/>	Pedicle length:	1 = Short (Yolo Wonder L)	2 = Long (Anaheim Chili)
<input type="text" value="2"/>	Pedicle shape:	1 = Straight	2 = Curved
<input type="text" value="1"/>	Pedicle Thickness:	1 = Slender (Cayenne)	2 = Thick (Yolo Wonder L)

7. SEED:

<input type="text" value="1"/>	Seed color:	1 = Yellow	2 = Purple
<input type="text" value="07"/>	g/1000 seeds		

8. ANTHOCYANIN (1 = Absent, 2 = Present):

<input type="text" value="1"/>	Leaf	<input type="text" value="1"/>	Stem	* <input type="text" value="2"/>	Node	<input type="text" value="1"/>	Calyx	<input type="text" value="1"/>	Pedicle	* <input type="text" value="2"/>	Seedling Hypocotyl
<input type="text" value="2"/>	Fruit										

9. DISEASE REACTION (0 = Not tested, 1 = Susceptible, 2 = Resistant):

<input type="text" value="0"/>	Cucumber mosaic virus	<input type="text" value="0"/>	Bacterial spot (<i>Xanthomonas vesicatoria</i>)
<input type="text" value="0"/>	Curly top virus	<input type="text" value="0"/>	Cercospora leaf spot (<i>Cercospora capsici</i>)
<input type="text" value="0"/>	Pepper mottle virus	<input type="text" value="0"/>	Phytophthora root rot (<i>Phytophthora capsici</i>)
<input type="text" value="0"/>	Potato Y virus	<input type="text" value="0"/>	Ripe rot (<i>Vermicularia capsici</i>)
<input type="text" value="0"/>	Tobacco etch virus	<input type="text" value="0"/>	Southern blight (<i>Sclerotium rolfsii</i>)
<input type="text" value="0"/>	Tobacco mosaic virus	<input type="text" value="0"/>	Verticillium wilt (<i>Verticillium dahliae</i>)
<input type="text" value="0"/>	Anthraxnose (<i>Gloeosporium piperatum</i>)	<input type="text" value="0"/>	Nematode (<i>Meloidogyne incognita acrita</i>)
		<input type="text"/>	Other (Specify) _____

10. INDICATE THE VARIETY MOST CLOSELY RESEMBLING THE APPLICATION VARIETY FOR THE FOLLOWING:

CHARACTER	VARIETY	CHARACTER	VARIETY
Maturity	"Habanero"	Fruit shape	"Hot Cherry" / "Habanero"
Plant habit	"Habanero"	Immature fruit color	Unknown
Leaf color	"Habanero"	Mature fruit color	"Sweet Pepper" / "Pimiento" etc.
Leaf shape	"Habanero"	Pungency	"Sweet Pepper" / "Sweet Cherry"

11. COMMENTS:

* See Complete Response Statement
Requirement 9

Corrections with regard to species classification and precise definitions of certain qualitative characteristics were brought into account in the Revised Exhibit C.

*Revised Exhibit C for the Application Variety – Comments

2. Market Maturity

Days from transplanting until mature green stage may vary between 80 and 90 days.

Days from transplanting until mature red stage may vary between 100 and 120 days.

Market maturity for "Juanita" will depend mainly on the amount of heat units available to the plant from the date of transplanting. An early increase in heat units will result in the fruit maturing earlier.

5. Flower

The corolla color can accurately be described as off-white, since it does not have the same intense white color as flowers belonging to *C. annuum* or *C. chinensis*.

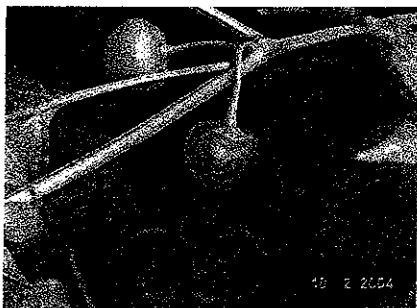
Petal number is mostly five, but occasional flowers on the first flowering node may have six petals.

6. Fruit

The fruit from "Juanita" would belong taxonomically to the *C. baccatum* group, with the pod shape falling between a "Cherry" type – hot and "Habanero".

The immature color of the fruit does not stay entirely medium green, but develop purple discolorations (anthocyanin) on the surface, before changing to lighter shades of red and finally a deep, intense red.

The fruit shape of "Juanita" is neither oblate at both ends, nor globular, but rather heart-shaped, with a flattened top.



"Juanita" Heart shaped, flattened at the top, tapering downwards.

Oblate, flattened
both ends →



Globular, round →



8. Anthocyanin

Although anthocyanin is present in the seedling hypocotyl and nodes, it is very weak (above picture). In the fruit, however, anthocyanin is strongly visible before the fruit turns red.

Requirement 10

The variety name is "Juanita" and you have permission to correct the name.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)

~~JOHANNES MARTINUS STEENKAMP~~
Piquante Brands International (PTY) Limited
101 MacGillivray Road
Glenferness, Midrand
Gauteng, South Africa
Phone : +27 11 516 4202
Fax +27 11 463 3341
E-mail : ptovens@peppadew.co.za

entry)

2. TEMPORARY DESIGNATION
OR EXPERIMENTAL NUMBER

3. VARIETY NAME

Juanita

~~Piquante~~

5. TELEPHONE (include area code)

(27) 12 463 203

6. FAX (include area code)

(27) 12 463 370

7. PVPO NUMBER

9800051

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country Republic of South Africa☐ YES☒ NO

10. Is the applicant the original breeder? If no, please answer the following:

☒ YES☐ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

☐ YES☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country _____

11. Additional explanation on ownership (If needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

STD-470-E (03-96)

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USA

DEED OF ASSIGNMENT

THIS DEED is made between:

JOHANNES MARTINUS STEENKAMP, a South African businessman of Tzaneen

("the ASSIGNOR");

and

Piquante Brands International (Proprietary) Limited, a South African company of 101 Macgillivray Road, Glenferness, Midrand, Gauteng, South Africa

("the ASSIGNEE");

WHEREAS:

- (a) The ASSIGNOR is the applicant for registration of a US Plant Variety named "JUANITA" having US serial No. 9800051 ("the plant breeders right"); and
- (b) The ASSIGNOR and the ASSIGNEE have agreed that the plant breeders right should be transferred to the ASSIGNEE.

IT IS AGREED THAT:

- 1 -

For full and sufficient consideration, the ASSIGNOR assigns full and beneficial ownership in the plant breeders right with effect from the date of the last signature of this agreement to the ASSIGNEE.

- 2 -

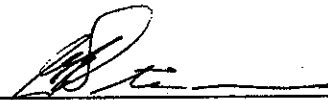
The ASSIGNEE accepts the assignment of the plant breeders right, subject to the terms of this deed.

HELEN MARY ANNE BURT
Commissioner of Oaths
Practising Attorney R.S.A.
10 Fricker Road
Illovo Boulevard
Johannesburg 2196

Burt 4/1/05
CERTIFIED A TRUE COPY
OF THE ORIGINAL


[Handwritten signatures and initials]
22

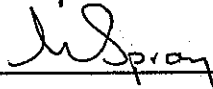
Signed on behalf of the ASSIGNOR this 20th day of July 2004 by the undersigned in the presence of the undersigned witnesses.



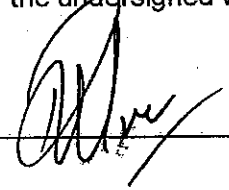
full name: JOHANNES MARTINUS STEENKAMP

WITNESSES:

1. 

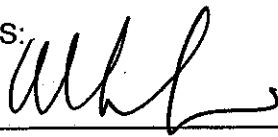
2. 


Signed on behalf of the ASSIGNEE this 10th day of December 2004 by the undersigned competent officer thereof in the presence of the undersigned witnesses.



Title: Managing Director

WITNESSES:

1. 

2. 

OUR REF: Mrs B Berdou

HELEN MARY ANNE BURT

Commissioner of Oaths
Practising Attorney R.S.A.
10 Fricker Road
Illovo Boulevard
Johannesburg 2196

Burt 4/11/05

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